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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/530,302

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Antonius Johannes Nellissen

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9661

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01/15/2009

LIU & LIU

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LOS ANGELES, CA 90071

EXAMINER

HANLEY, BRITT D

ART UNIT

PAPER NUMBER

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PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/530,302	<b>Applicant(s)</b> NELLISSEN, ANTONIUS JOHANNES	
	<b>Examiner</b> BRITT HANLEY	<b>Art Unit</b> 2889	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 14 October 2008.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1,4-7 and 9-22 is/are pending in the application.  
     4a) Of the above claim(s) 1,4-6,11,12 and 15-18 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 7,9,10,13,14 and 19-22 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 05 April 2005 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
     Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
     Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
     a) ☒ All    b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                                | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## DETAILED ACTION

### *Response to Amendment*

[01] Amendment filed on 10/14/2008 has been entered and noted by Examiner. Claims 2, 3 and 8 are cancelled in the application, and claims 1, 4-7, and 9-22 are pending.

[02] Claims 1, 4-6, 11, 12, and 15-18 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected method, there being no allowable generic or linking claim. Election was made **without** traverse in the reply filed on 10/14/2008.

[03] The claims filed 10/14/2008 do not present non-elected claims as withdrawn. Appropriate correction is required.

### *Drawings*

[04] The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the resist structure and its removal must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

[05] Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet,

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and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

### ***Specification***

[06] The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.

### ***Claim Rejections - 35 USC § 102***

[07] The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

[08] Claims 7, 9, and 10 are rejected under 35 U.S.C. 102(b) as being anticipated by Fujimori et al. (EP 1 139 455 A2).

[09] Regarding claim 7, Fujimori *et al.* disclose a light emitting display comprising a plurality of light emitting elements (paragraph 26, lines 12-19) on a substrate (1, Fig. 9a), said light emitting elements being defined by sites (Fig. 9a, Fig. 10a, Fig. 12 a all show sites where light emitting elements reside) on or over said substrate (1, Fig. 9a)

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comprising light emitting materials (71, Fig. 13a) characterized in that at least some of said sites are at least partially bounded by a hydrophobic flow barrier (41, Fig. 9a, Fig. 12a, & Fig. 13a) and second electrodes (2 & 8, fig. 14a) for driving said light emitting elements.

[10] The applicant is claiming the product of a light emitting device including a method (i.e. a process) of applying a hydrophobic material on or over a resist structure (photolithography method), consequently, claim 7 is considered “product-by-process” claim. In spite of the fact that the product-by-process claim may recite only process limitations, it is the product and not the recited process that is covered by the claim. Further, patentability of a claim to a product does not rest merely on the difference in the method by which the product is made. If the product in the product-by-process claim is the same as or obvious from a product of the prior art, the claim is unpatentable even though the prior art product was made by a different process.

[11] Furthermore, it is well established that a claimed apparatus cannot be distinguished over the prior art by a process limitation. Consequently, absent a showing of an unobvious difference between the claimed product and the prior art, the subject product-by-process claim limitation is not afforded patentable weight (see MPEP 2113).

[12] Regarding claim 9, light emitting display according to claim 7, wherein said display is a color display (paragraph 26, line 14).

[13] Regarding claim 10, electric device comprising a light emitting display according to claim 7 (paragraph 2).

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[14] Regarding claim 13, Fujimori *et al.* disclose the device of claim 7. The applicant is claiming the product of light emitting display including a method (i.e. a process) of depositing a hydrophobic layer using a resist structure and removing said resist structure, consequently, claim 13 is considered “product-by-process” claim. In spite of the fact that the product-by-process claim may recite only process limitations, it is the product and not the recited process that is covered by the claim. Further, patentability of a claim to a product does not rest merely on the difference in the method by which the product is made. If the product in the product-by-process claim is the same as or obvious from a product of the prior art, the claim is unpatentable even though the prior art product was made by a different process.

[15] Furthermore, it is well established that a claimed apparatus cannot be distinguished over the prior art by a process limitation. Consequently, absent a showing of an unobvious difference between the claimed product and the prior art, the subject product-by-process claim limitation is not afforded patentable weight (see MPEP 2113).

[16] Regarding claim 19, Fujimori *et al.* disclose a light emitting display having a plurality of light emitting elements, comprising: a substrate (1); delimiting structures on the substrate (3) to separate adjacent sites for forming the light emitting elements (Figure 9a); areas defined at top of the delimiting structures for forming repellant parts (41); repellant parts in the defined areas at the top of the delimiting structures (Figure 9a); light emitting elements formed at the sites (Figure 9a) using liquid light emitting substance (6), wherein the repellant parts is repellant to the fluid light emitting substance (paragraph 36), such that the repellant parts prevent the fluid light emitting

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substance from flowing over the top of the delimiting structures to adjacent sites during forming of the light emitting elements (paragraph 38).

***Claim Rejections - 35 USC § 103***

[17] The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

[18] The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

[19] Claims 14 and 20-22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fujimori et al. (EP 1 139 455 A2) in view of Seki et al. (US 2004/0201048 A1).

[20] Regarding claim 14, Fujimori et al. disclose the light emitting display according to claim 7, further the hydrophobic barrier (41) is formed on delimiting structures (3) separating adjacent sites (Figure 5a). Fujimori et al. do not explicitly appear to disclose that the width of the hydrophobic flow barrier is less than the width of the top of the delimiting means.

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[21] However, in the same field of EL devices, Seki et al. disclose an upper hydrophobic bank (131) and a wider lower bank (130). The upper bank functions as the hydrophobic flow barrier, and the lower bank functions as the delimiting means.

[22] At the time the invention was made, it would have been obvious to a person having ordinary skill in the art having the references of Fujimori *et al.* and Seki *et al.* to modify the widths of the hydrophobic flow barrier and delimiting means of Fujimori *et al.* to include the wider delimiting means of Seki *et al.* in order to form the light emitting material (203) with a uniform thickness.

[23] Regarding claim 20, Fujimori et al. disclose the limitations of claim 19. Fujimori *et al.* do not explicitly appear to disclose that the width of the hydrophobic flow barrier is less than the width of the top of the delimiting means.

[24] However, in the same field of EL devices, Seki et al. disclose an upper hydrophobic bank (131) and a wider lower bank (130). The upper bank functions as the hydrophobic flow barrier, and the lower bank functions as the delimiting means.

[25] At the time the invention was made, it would have been obvious to a person having ordinary skill in the art having the references of Fujimori *et al.* and Seki *et al.* to modify the widths of the hydrophobic flow barrier and delimiting means of Fujimori *et al.* to include the wider delimiting means of Seki *et al.* in order to form the light emitting material (203) with a uniform thickness.

[26] Regarding claims 21 and 22, the combination of Fujimori *et al.* and Seki *et al.* disclose the light emitting display of claim 20.

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[27] The applicant is claiming the product of a light emitting display including a method (i.e. a process) of depositing a hydrophobic layer using a resist structure and removing said resist structure, consequently, Claims 21 and 22 are considered “product-by-process” claim. In spite of the fact that the product-by-process claim may recite only process limitations, it is the product and not the recited process that is covered by the claim. Further, patentability of a claim to a product does not rest merely on the difference in the method by which the product is made. If the product in the product-by-process claim is the same as or obvious from a product of the prior art, the claim is unpatentable even though the prior art product was made by a different process.

[28] Furthermore, it is well established that a claimed apparatus cannot be distinguished over the prior art by a process limitation. Consequently, absent a showing of an unobvious difference between the claimed product and the prior art, the subject product-by-process claim limitation is not afforded patentable weight (see MPEP 2113).

[29] Further yet, Seki *et al.* disclose a photolithography process can be used to form the upper and lower banks (paragraph 16).

### ***Response to Arguments***

[30] Applicant's arguments filed 10/14/2008 and 03/21/2008 have been fully considered but they are not persuasive. Applicant argues that the prior art does not disclose a resist structure. In spite of the fact that the product-by-process claim may recite only process limitations, it is the product and not the recited process that is covered by the claim. Further, patentability of a claim to a product does not rest merely

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on the difference in the method by which the product is made. If the product in the product-by-process claim is the same as or obvious from a product of the prior art, the claim is unpatentable even though the prior art product was made by a different process. Since Fujimori *et al.* has the same structure, the claim is unpatentable over Fujimori *et al.*

### **Conclusion**

[31] The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. See PTO-892.

[32] Also note that Seki *et al.* (US 2004/0201048A1) recite a photolithography process for forming the upper bank (hydrophobic flow barrier). This is the same process as recited in claims 7, 13, 21, and 22 of the instant application.

[33] Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

[34] A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

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the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

[35] Any inquiry concerning this communication or earlier communications from the examiner should be directed to Britt Hanley whose telephone number is (571) 270-3042. The examiner can normally be reached on Monday - Thursday, 6:30a-5:00p ET.

[36] If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Minh-Toan Ton can be reached on (571)272-2303. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

[37] Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Britt Hanley/ Examiner, Art Unit 2889	/Toan Ton/ Supervisory Patent Examiner, Art Unit 2889
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